45

46

#### RAW SEQUENCE LISTING PATENT APPLICATION US/08/670,119

DATE: 12/10/96 TIME: 16:41:25

INPUT SET: S14311, raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

#4

```
SEQUENCE LISTING TERED
 1
 2
 3
            General Information:
     (1)
          (i) APPLICANT: NG, GORDON Y K
 5
                         SEEMAN, PHILIP
 6
                         GEORGE, SUSAN R
 7
                         O'DOWD, BRIAN
 8
 9
10
         (ii) TITLE OF INVENTION: RECEPTOR AND TRANSPORTER ANTAGONISTS
11
        (iii) NUMBER OF SEQUENCES: 63
12
13
         (iv) CORRESPONDENCE ADDRESS:
14
15
               (A) ADDRESSEE: TESTA, HURWITZ & THIBEAULT, LLP
16
               (B) STREET: HIGH STREET TOWER, 125 HIGH STREET
17
               (C) CITY: BOSTON
18
               (D) STATE: MASSACHUSETTS
19
               (E) COUNTRY: USA
               (F) ZIP: 02110
20
21
22
          (V) COMPUTER READABLE FORM:
23
               (A) MEDIUM TYPE: Floppy disk
24
               (B) COMPUTER: IBM PC compatible
               (C) OPERATING SYSTEM: PC-DOS/MS-DOS
25
               (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
26
27
         (vi) CURRENT APPLICATION DATA:
28
29
               (A) APPLICATION NUMBER: US 08/670,119
30
               (B) FILING DATE: 25-JUN-1996
31
               (C) CLASSIFICATION:
32
33
       (viii) ATTORNEY/AGENT INFORMATION:
34
               (A) NAME: TWOMEY, MICHAEL J
35
               (B) REGISTRATION NUMBER: 38,349
36
               (C) REFERENCE/DOCKET NUMBER: SIM-001 (7434/2)
37
38
         (ix) TELECOMMUNICATION INFORMATION:
39
               (A) TELEPHONE: (617) 248-7000
40
               (B) TELEFAX: (517) 248-7100
41
42
43
    (2) INFORMATION FOR SEQ ID NO:1:
44
```

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 23 amino acids

### RAW SEQUENCE LISTING PATENT APPLICATION US/08/670, 119

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```
INPUT SET: S14311.raw
                     (B) TYPE: amino acid
      47
                     (C) STRANDEDNESS: single
      48
                     (D) TOPOLOGY: linear
      49
      50
      51
               (ii) MOLECULE TYPE: peptide
      52
      53
      54
      55
      56
               (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
1.0
      57
                Ala Thr Leu Leu Thr Leu Leu Ile Ala Val Ile Val Phe Gly Asn Val
      58
      59
                1
                                 5
                                                      10
      60
      61
                Leu Val Cys Met Ala Val Ser
      62
      63
           (2) INFORMATION FOR SEQ ID NO:2:
      64
      65
      66
                (i) SEQUENCE CHARACTERISTICS:
      67
                     (A) LENGTH: 26 amino acids
                     (B) TYPE: amino acid
      68
      69
                     (C) STRANDEDNESS: single
      70
                     (D) TOPOLOGY: linear
      71
               (ii) MOLECULE TYPE: peptide
      72
      73
      74
      75
      76
      77
               (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:
      78
                Leu Ile Val Ser Leu Ala Val Ala Asp Leu Leu Val Ala Thr Leu Val
      79
      80
      81
                Met Pro Trp Val Val Tyr Leu Glu Val Val
      82
      83
      84
           (2) INFORMATION FOR SEQ ID NO:3:
      85
      86
      87
                (i) SEQUENCE CHARACTERISTICS:
      88
                     (A) LENGTH: 22 amino acids
      89
                     (B) TYPE: amino acid
      90
                     (C) STRANDEDNESS: single
      91
                     (D) TOPOLOGY: linear
      92
      93
               (ii) MOLECULE TYPE: peptide
      94
      95
      96
      97
      98
               (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:
```

(D) TOPOLOGY: linear

### RAW SEQUENCE LISTING PATENT APPLICATION US/08/670, 119

DATE: 12/10/96 TIME: 16:41:33

```
INPUT SET: S14311.raw
           Ile Val Phe Thr Leu Asp Val Met Met Cys Thr Ala Ser Ile Leu Asn
101
                                                10
102
103
           Leu Cys Ala Ile Ser Ile
104
                       20
105
106
      (2) INFORMATION FOR SEQ ID NO:4:
107
108
           (i) SEQUENCE CHARACTERISTICS:
109
                (A) LENGTH: 23 amino acids
110
                (B) TYPE: amino acid
111
                (C) STRANDEDNESS: single
112
                (D) TOPOLOGY: linear
113
114
          (ii) MOLECULE TYPE: peptide
115
116
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:
117
118
           Val Thr Val Met Ile Ser Ile Val Trp Val Leu Ser Phe Thr Ile Ser
119
120
121
           Cys Pro Leu Leu Phe Gly Leu
122
123
124
125
     (2) INFORMATION FOR SEQ ID NO:5:
126
127
           (i) SEQUENCE CHARACTERISTICS:
128
                (A) LENGTH: 24 amino acids
129
                (B) TYPE: amino acid
130
                (C) STRANDEDNESS: single
131
                (D) TOPOLOGY: linear
132
133
         (ii) MOLECULE TYPE: peptide
134
135
136
137
138
         (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:
139
140
          Pro Ala Phe Val Val Tyr Ser Ser Ile Val Ser Phe Tyr Val Pro Phe
141
142
143
          Ile Val Thr Leu Leu Val Tyr Ile
144
145
     (2) INFORMATION FOR SEQ ID NO:6:
146
147
148
          (i) SEQUENCE CHARACTERISTICS:
149
               (A) LENGTH: 23 amino acids
150
                (B) TYPE: amino acid
151
               (C) STRANDEDNESS: single
```

# RAW SEQUENCE LISTING PATENT APPLICATION US/08/670,119

DATE: 12/10/96 TIME: 16:41:37

INPUT SET: S14311.raw

	H41 01 3E1. 514511.14#
153	
154	(ii) MOLECULE TYPE: peptide
155	
156	
157	
158	TO THE PROPERTY OF THE NO. C.
159	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:
160	Met Leu Ala Ile Val Leu Gly Val Phe Ile Ile Cys Trp Leu Pro Phe
161	- 10
162	1 5 10 13
163	Phe Ile Thr His Ile Leu Asn
164 165	20
166	
167	(2) INFORMATION FOR SEQ ID NO:7:
168	(Z) INIONALION LON DEE TO STATE
169	(i) SEQUENCE CHARACTERISTICS:
170	(A) LENGTH: 24 amino acids
171	(B) TYPE: amino acid
172	(C) STRANDEDNESS: single
173	(D) TOPOLOGY: linear
174	
175	(ii) MOLECULE TYPE: peptide
176	
177	770 TD NO.7
178	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:
179	
180	Val Leu Tyr Ser Ala Phe Thr Trp Leu Gly Tyr Val Asn Ser Ala Val
181	1 5 10 15
182	Asn Pro Ile Ile Tyr Thr Thr Phe
183 184	ASH FIO THE THE THE THE
185	
186	(2) INFORMATION FOR SEQ ID NO:8:
187	
188	(i) SEQUENCE CHARACTERISTICS:
189	(A) LENGTH: 443 amino acids
190	(B) TYPE: amino acid
191	(C) STRANDEDNESS: single
192	(D) TOPOLOGY: linear
193	
194	(ii) MOLECULE TYPE: protein
195	A LA GROUPINGE DEGODIEMION. SEO ID NO.9.
196	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:
197	Met Asp Pro Leu Asn Leu Ser Trp Tyr Asp Asp Asp Leu Glu Arg Gln
198	Met Asp Pro Leu Ash Leu Sei Tip Tyl Asp Asp Bed Sid Mig Sin
199 200	
200	Asn Trp Ser Arg Pro Phe Asn Gly Ser Asp Gly Lys Ala Asp Arg Pro
201	20 25 30
202	
204	His Tyr Asn Tyr Tyr Ala Thr Leu Leu Thr Leu Leu Ile Ala Val Ile
205	35 40 45

# RAW SEQUENCE LISTING PATENT APPLICATION US/98/670,119

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INPUT SET: S14311.raw

206																
207	Val	Phe	Gly	Asn	Val	Leu	Val	Cys	Met	Ala	Val	Ser	Arg	Glu	Lys	Ala
208		50					55					60				
209																
210	Leu	Gln	Thr	Thr	Thr	Asn	Tyr	Leu	Ile	Val	Ser	Leu	Ala	Val	Ala	Asp
211	65					70	_				75					80
212																
213	Leu	Leu	Val	Ala	Thr	Leu	Val	Met	Pro	Trp	Val	Val	Tyr	Leu	Glu	Val
214					85					90			•		95	
215																
216	Va1	Glv	Glu	Trp	Lvs	Phe	Ser	Ara	Ile	His	Cvs	Asp	Ile	Phe	Val	Thr
217				100	-1-			3	105		- 1			110		
218				-00												
219	T 011	λen	Val	Met	Mat	Cve	Thr	λla	Sar	T1a	T. 011	Δen	T.em	Cvs	Δla	Tle
220	пец	ASP	115	Mec	Mec	Cys	1111	120	DCI	110	пси	AS.	125	Cyb	ALG	110
221			113					120					123			
222	502	т1 о	A an	Arg	m	mb x	212	Val	A 7 a	Mot	Dro	Mot	LOU	Птт	λen	Thr
	ser		ASP	Arg	Tyr	THE		Val	Ата	мес	PIO		Leu	ıyı	ASII	IIII.
223		130					135					140				
224			<b>~</b>	<b>~</b>		•	•	7	m\		L	<b>-1</b> -	<b>~</b>	T7 -	**- 7	OT
225		Tyr	ser	Ser	ràs	_	arg	vaı	THE	vaı		тте	Ser	тте	vаı	_
226	145					150					155					160
227		_			_,		_	_	_	_	_	_,	-1	_	_	_
228	Val	Leu	Ser	Phe		ITe	Ser	Cys	Pro		Leu	Phe	GTÀ	Leu		Asn
229					165					170					175	
230	_		_		_		_	_	_			_	_	_		
231	Ala	Asp	Gln	Asn	Glu	Cys	Ile	Ile		Asn	Pro	Ala	Phe		Val	Tyr
232				180					185					190		
233																_
234	Ser	Ser	Ile	Val	Ser	Phe	Tyr	Val	Pro	Phe	Ile	Val	Thr	Leu	Leu	Val
235			195					200					205			
236																
237	Tyr	Ile	Lys	Ile	Tyr	Ile	Val	Leu	Arg	Arg	Arg	Arg	Lys	Arg	Val	Asn
238		210					215					220				
239																
240	Thr	Lys	Arg	Ser	Ser	Arg	Ala	Phe	Arg	Ala	His	Leu	Arg	Ala	Pro	Leu
241	225					230					235					240
242																
243	Lys	Gly	Asn	Cys	Thr	His	Pro	Glu	Asp	Met	Lys	Leu	Cys	Thr	Val	Ile
244	_	_		_	245					250					255	
245																
246	Met	Lys	Ser	Asn	Gly	Ser	Phe	Pro	Val	Asn	Arg	Arg	Arg	Val	Glu	Ala
247		_		260	-				265		•	_		270		
248																
249	Ala	Ara	Ara	Ala	Gln	Glu	Leu	Glu	Met	Glu	Met	Leu	Ser	Ser	Thr	Ser
250			275			'		280				·	285			
251			-· <del>-</del>													
<del>252</del>	Pro	Pro	Glu	Arg	Thr	Ara	Tvr	Ser	Pro	Ile	Pro	Pro	Ser	His	His	Gln
253		290		3	<b></b>	5	295					300				
254																
255	Leu	Thr	Leu	Pro	Asp	Pro	Ser	His	His	Glv	Leu	His	Ser	Thr	Pro	Asp
256	305					310				1	315					320
257	555										-10					
258	Ser	Pro	Δla	Lys	Pro	Glu	T.vc	Δsn	Glv	Hie	Δla	ſ.v≈	Asp	His	Pro	I.vs
230	261	110	AIG	цys	110	Jiu	-73	A011	O <sub>T</sub> y		AIG	-73	715P		0	-1-